ra Garden Clippings Niagara College Greenhouse & Nursery Success Sheet No. 65



Improving Composting

Understanding Micro-organisms

Niagara College

Canada

Left alone, your kitchen scraps and yard waste will slowly decompose. With a little bit of effort, however, you can speed up the process. Micro-organisms are responsible for breaking down organic matter and require a few things for encouragement. Understanding how they live lets you know how to give them optimum living conditions.

Adding Organic Matter

Chop organic matter into smaller pieces before adding it to your pile. The smaller the pieces, the faster the decomposition. Alternate layers of wet and dry material. A healthy compost pile is a cubic metre and has a good balance of kitchen and yard scraps.

Watering the Compost

A good compost pile should be as wet as a squeezed-out sponge. When choosing a location, ensure that you have shade and good soil drainage. Compost that is too moist will have an odor. Dry compost will be slow to decompose. A good idea is to cover the compost so rain cannot soak the pile. During the heat of summer, if your compost is dry, you can wet it with a garden hose.

Turning the Compost

The micro-organisms that break down compost require oxygen to live. Mixing your compost every two weeks supplies the necessary oxygen and speeds up the process.

When selecting a barrier for your compost, choose something with lots of air spaces.

Balancing Carbon and Nitrogen

A healthy diet for micro-organisms is carbon and nitrogen. To ensure a speedy breakdown, you could add a few things. Carbon is supplied in the plant material. Mix wet and dry compost to supply different amounts of carbon.

Nitrogen can be found in plant material or added synthetically. Grass clippings and manure are excellent sources of nitrogen. You could also add blood meal or a fertilizer with a high nitrogen content. Just remember: when adding fertilizer, too much will manufacture ammonia.

You could also add compost accelerator (found in most garden centers) or almostfinished compost. Both of these contain the necessary micro-organisms required for breakdown.

Checking the Compost

Don't judge your pile by what it looks like on top. Flip over a section, and look for steam rising from the pile. Active compost should feel warm to the touch. This means the microorganisms are hard at work.

Finished compost is dark and not warm to the touch. If you add unfinished compost to your plants, the micro-organisms will compete with them for nitrogen.

If you put effort into compost, you should be able to reap the benefits in six to eight weeks.

Kristi Montovani, Class of 2004

Niagara College Greenhouse & Nursery

Niagara-on-the-Lake Campus, 135 Taylor Road, Niagara-on-the-Lake, ON L0S 1J0 phone: (905) 641-2252, ext. 4082; fax: (905) 988-4307 e-mail: mnewell@niagaracollege.ca Website: http://greenhousenursery.niagaracollege.ca